STATE OF CALIFORNIA UNITED STATES GOODWIN J. KNIGHT, GOVERNOR OBSERVATION PEAK QUADRANGLE DEPARTMENT OF THE INTERIOR FRANK B. DURKEE, DIRECTOR OF PUBLIC WORKS CALIFORNIA-LASSEN CO. GEOLOGICAL SURVEY 120°15′ 41°00′ A. D. EDMONSTON, STATE ENGINEER 15 MINUTE SERIES (TOPOGRAPHIC) 120°00 Dodge bark escarpment E-facing bark escarpment subduel W-facing scarp la book back poorly sefined well-defined back escarpment Sugarloaf -ounded bark esearpment INDEX TO FIELD OBSERVATIONS Tonal lineament in bedrock verified, but there is no geomorphic evidence of recent faulting. The top of the ridge is continuous and unbroken where fault is mapped. Slightly benched area is suggestive of old shoreline, but lacks shoreline deposits. H B "Sag depression" described by Weick (1990, p. 51) is better described as a broad, poorly defined trough that may not be related to tectonic processes. Channel cut (artificial) exposes lacustrine/deltaic gravels - crossbedded coarse cobbley gravel - terrace/lacustrine deposits Dunn overlie gravels and have weakly developed Bt soil horizon with Reservoir thin patchy clay films on sand grains, weak subangular blocky to columnar ped. structures, 10YR 4/3 (d); 10YR 2/2 (m) color. JEEP Bt horizon about 6 cm thick. No evidence of faulting in this exposure. Scarp profile in possible shoreline scarp: h = 4.3 meters;  $\triangleleft$  = Shoreline 4 = 12°-14 /27-90  $13^{\circ}$ ; c ~ 6 meters. Vegetation contrast - no geomorphic evidence of recent "sag depression" starp poorly faulting. Area across tonal lineament is graded, providing a back escapement - 13 of Weick (1990) geomorphic evidence of recent thaulting continuous exposure of lacustrine sands across tonal. No defined evidence of faulting in slightly indurated lacustrine sands. t, possible shorelines Scarps in alluvial fan to the north are wave-cut and do not align with west-facing bedrock scarp to the north. Vegetation contrast, no scarp. Vc is crudely linear, but broadens to the southwest and becomes poorly defined. 21 & Windmill t's in this area - most trend NW corp concealed by extran deposits 28 ADE N/S wave cut shore (no (?) Sp h 2 4 5 m wave-cut scarp E 10 7-90 h= 3.5m 4= 13°34 Buckhorn 33 ch 5mf/17-90 35 MAP EXPLANATION 50' SM 5330 Faults mapped by CDWR (1963), dashed where approximately located, dotted where concealed; U denotes upthrown side, D denotes downthrown side. Shoreline not offset Shoreling BM 5308 > Faults mapped by Weick (1990), dashed where approximate, dotted where buried, querried where uncertain, bell on downthrown side. 12 Recently active faults mapped by Bryant (this report), based on air photo interpretation and limited field mapping (indicated by f/c and date). Solid line indicates well-defined feature, dashed where approximately located, short dash where inferred, dotted where f/c 7-90 concealed; queries indicate additional uncertainty; hachures indicate extent and direction Pothole Spr scarp faces. Locality referred to in text. 13 Fault is well-defined and/or was verified as exhibiting geomorphic evidence of latest Pleistocene to Holocene displacement by Bryant (this report). Fault is not well-defined and/or was not verified as exhibiting geomorphic evidence of NV latest Pleistocene to Holocene displacement by Bryant (this report). Key to faulted and unfaulted deposits -deposit offset L - late Pleistocene H - Holocene -deposit not offset Q - Quaternary Ranch Scarp Profile Data measured by Bryant (this report) h-scarp height c-scarp crest width Geomorphic features indicative of fault recency and/or location, based on air photo interpretation and field mapping by Bryant (this report) dov - drainage offset vertically or exhibits "wineglass" b - bench Observation Peak bd - beheaded drainage bis - break in slope cd - closed depression configuration ld - linear drainage Ir - linear ridge pa - ponded alluvium dd - deflected drainage rl-right lateral II- left lateral s - saddle dno - drainage not offset t - tonal lineament tr - trough Figure 2f (to FER-218). Traces of the Likely fault zone in the Canby - Madeline Plains study area, based on available mapping of others and air photo interpretation by T. 33 N Bryant (this report). . 33 N. 40°45′ 40°45′ R. 17 E. INTERIOR—GEOLOGICAL SURVEY, WASH. D. C.-1955 NS 120°15′ SCALE 1:62500 Mapped, edited, and published by the Geological Survey ROAD CLASSIFICATION Control by USGS and USC&GS Topography from aerial photographs by multiplex methods and by plane-table surveys 1954. Aerial photographs taken 1951 Light-duty... Medium-duty \_\_\_\_\_ Unimproved dirt \_\_\_\_\_ Polyconic projection. 1927 North American datum U. S. Route State Route 10,000-foot grid based on California coordinate system, zone 1 Dashed land lines indicate approximate locations CONTOUR INTERVAL 40 FEET DASHED LINES REPRESENT HALF INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL OBSERVATION PEAK, CALIF. APPROXIMATE MEAN N4045-W12000/15 DECLINATION, 1954 THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
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